

GLOSSARY OF TERMS

Adaptive Management. Adaptive management is a systematic approach for continually improving management policies and practices by learning from the outcomes of operational programs.

Aquatic Area. Any non-wetland water feature including all shorelines of the state, rivers, streams, marine waters, inland bodies of open water including lakes and ponds, reservoirs and conveyance systems and impoundments of these features if any portion of the feature is formed from a stream or wetland and if any stream or wetland contributing flows is not created solely as a consequence of stormwater pond construction. "Aquatic area" does not include water features that are entirely artificially collected or conveyed storm or wastewater systems or entirely artificial channels, ponds, pools or other similar constructed water features.

Base Flood. The base flood is a flood having a one percent chance of being equaled or exceeded in any given year, often referred to as the "100-year flood."

Basin. A basin is a geographic area that contains and drains to a stream named and noted on common maps or a geographic area that drains to a non-flowing water body, such as a lake or marine area, named and noted on common maps.

Basin Plan. A basin plan is a plan and all implementing regulations and procedures including, but not limited to, capital projects, public education activities, land use management adopted by ordinance for managing surface and storm water within the basin.

Benefit. A benefit is a net project outcome and is usually defined in monetary terms. Benefits may include direct and indirect effects. For the purposes of benefit-cost analysis of proposed mitigation measures, benefits are limited to specific, measurable, risk reduction factors, including reduction in expected property losses (buildings, contents, and functions) and protection of human life.

Benefit/Cost Analysis. A benefit/cost analysis is a systematic, quantitative method of comparing projected benefits to projected costs of a project or policy. It is used as a measure of cost effectiveness.

Bioengineering. Bioengineering is the use of vegetation and other natural materials such as soil, wood and rock to stabilize soil, typically against slides and stream flow erosion. When natural materials alone do not possess the needed strength to resist hydraulic and gravitational forces, "bioengineering" may consist of the use of natural materials integrated with human-made fabrics and connecting materials to create a complex matrix that joins with in-place native materials to provide erosion control.

Capital Improvement Project. A capital improvement project is a constructed project facility such as a road improvement or stormwater control facility that is generally of a durable nature. Capital improvement projects may be considered assets rather than as expenses for accounting purposes.

Channel Migration Zone. A channel migration zone is those areas within the lateral extent of likely stream channel movement that are subject to risk due to stream bank destabilization, rapid stream incision, stream bank erosion and shifts in the location of stream channels, as shown on King County's Channel Migration Zone maps. "Channel migration zone" means the corridor that includes the present channel, the severe channel migration hazard area and the moderate channel migration hazard area. "Channel migration zone" does not include areas that lie behind an arterial road, a public road serving as a sole access route, a state or federal highway or a railroad. "Channel migration zone" may exclude areas that lie behind a lawfully established flood protection facility that is likely to be maintained by existing

programs for public maintenance consistent with designation and classification criteria specified by public rule. When a natural geologic feature affects channel migration, the channel migration zone width will consider such natural constraints.

Community Rating System (CRS). The CRS is a voluntary program under the NFIP that rewards participating communities (provides incentives) for exceeding the minimum requirements of the NFIP and completing activities that reduce flood hazard risk by providing flood insurance premium discounts.

Compensatory Storage. Compensatory storage is new, excavated storage volume equivalent to any flood storage which is eliminated by building filling or grading within the flood plain. For the purpose of this definition, equivalent flood storage capacity is that which is replaced by equal volume between corresponding one-foot contour intervals which are hydraulically connected to the floodway through their entire depth.

Critical Area. Critical area is any area that is subject to natural hazards or a land feature that supports unique, fragile or valuable natural resources including fish, wildlife or other organisms or their habitats or such resources that carry, hold or purify water in their natural state. "Critical area" includes the following areas:

- A. Aquatic areas;
- B. Coal mine hazard areas;
- C. Critical aquifer recharge area;
- D. Erosion hazard areas;
- E. Flood hazard areas;
- F. Landslide hazard areas;
- G. Seismic hazard areas;
- H. Steep slope hazard areas;
- I. Volcanic hazard areas;
- J. Wetlands;
- K. Wildlife habitat conservation areas; and
- L. Wildlife habitat networks.

Critical Facility. Critical facility is a facility necessary to protect the public health, safety and welfare including, but not limited to, a facility defined under the occupancy categories of "essential facilities," "hazardous facilities" and "special occupancy structures" in the structural forces chapter or succeeding chapter in K.C.C. Title 16. Critical facilities also include nursing and personal care facilities, schools, senior citizen assisted housing, public roadway bridges and sites that produce, use or store hazardous substances or hazardous waste, not including the temporary storage of consumer products containing hazardous substances or hazardous waste intended for household use or for retail sale on the site.

Depth of Flooding (DOF). The DOF is difference between regulatory flood elevation (RFE) and the elevation of the lowest grade adjacent to a structure.

Development. Any man-made change to improved or unimproved real estate, including, but not limited to, buildings and other structures, mining, dredging, filling, grading, paving, extraction or drilling operations, farming, or storage of equipment or materials.

Disaster Mitigation Act of 2000 (DMA). The DMA is Public Law 106-390 and is the latest federal legislation enacted to encourage and promote proactive, pre-disaster planning as a condition of receiving financial assistance under the Robert T. Stafford Act. The DMA emphasizes planning for disasters before they occur. Under the DMA, a pre-disaster hazard mitigation program and new requirements for the national post-disaster hazard mitigation grant program (HMGP) were established.

Drainage Basin. A drainage area that drains to the Cedar river, Green river, Snoqualmie river, South Fork Skykomish river, White river, Lake Washington or other drainage area that eventually drains to Puget Sound.

Drainage Subbasin. A drainage area identified as a drainage subbasin in a county-approved basin plan or, if not identified, a drainage area that drains to a body of water that is named and mapped and contained within a drainage basin.

Erosion. Erosion is the wearing away of ground surface as the result of the movement of wind, water or ice.

Exposure. Exposure is defined as the number and dollar value of assets considered to be at risk during the occurrence of a specific hazard.

Extent. The extent is the size of an area affected by a hazard.

Federal Emergency Management Agency (FEMA). FEMA is an independent agency (now part of the Department of Homeland Security) created in 1978 to provide a single point of accountability for all federal activities related to disaster mitigation and emergency preparedness, response, and recovery.

FEMA Floodway. The FEMA floodway is the channel of the stream and that portion of the adjoining floodplain that is necessary to contain and discharge the base flood flow without increasing the base flood elevation more than one foot.

Flood or Flooding. A general and temporary condition of partial or complete inundation of normally dry land areas from the overflow of inland or tidal waters or the unusual and rapid accumulation of runoff of surface waters from any source.

Flood Fringe, Zero-Rise. The zero rise flood fringe is that portion of the floodplain outside of the zero-rise floodway. The zero-rise flood fringe is generally associated with standing water rather than rapidly flowing water.

Flood Hazard Areas. A flood hazard area is any area subject to inundation by the base flood or risk from channel migration including, but not limited to, an aquatic area, wetland or closed depression.

Flood Hazard Management Corridor. The flood hazard management corridor is an area of the floodplain allowing for the conveyance of unobstructed flood waters and providing for a range of riparian conditions of the river ecosystem.

Flood Insurance Rate Map (FIRM). FIRMs are the official maps on which the Federal Emergency Management Agency (FEMA) has delineated the Special Flood Hazard Area (SFHA).

Flood Insurance Study. A report published by the Federal Insurance and Mitigation Administration for a community in conjunction with the community's Flood Insurance Rate Map. The study contains such background data as the base flood discharges and water surface elevations that were used to prepare the FIRM. In most cases, a community FIRM with detailed mapping will have a corresponding flood insurance study.

Flood Protection Elevation. An elevation that is one foot above the base flood elevation.

Flood Protection Facility. A flood protection facility is a structure that provides protection from flood damage. Flood protection facility includes, but is not limited to, the following structures and supporting infrastructure:

- A. Dams or water diversions, regardless of primary purpose, if the facility provides flood protection benefits;
- B. Flood containment facilities such as levees, dikes, berms, walls and raised banks, including pump stations and other supporting structures; and
- C. Bank stabilization structures, often called revetments.

Flood Risk Reduction. Flood risk reduction is an action taken to decrease exposure of people and property to flood or channel migration hazards.

Floodplain. The floodplain is the total area subject to inundation by the base flood.

Floodway, Zero-Rise. The zero-rise floodway is the channel of a stream and that portion of the adjoining floodplain that is necessary to contain and discharge the base flood flow without any measurable increase in base flood elevation.

A. For the purpose of this definition, "measurable increase in base flood elevation" means a calculated upward rise in the base flood elevation, equal to or greater than 0.01 foot, resulting from a comparison of existing conditions and changed conditions directly attributable to alterations of the topography or any other flow obstructions in the floodplain. "Zero-rise floodway" is broader than that of the FEMA floodway but always includes the FEMA floodway.

B. "Zero-rise floodway" includes the entire floodplain unless a critical areas report demonstrates otherwise.

Freeboard. A factor of safety usually expressed in feet above a flood level for purposes of floodplain management.

Future Conditions Floodplain or Flood Hazard Area. The land area that would be inundated by the 1-percent-annual-chance (100-year) flood based on future conditions hydrology.

Future Conditions Hydrology. Future conditions hydrology is the flood discharges associated with projected land-use conditions based on a community's zoning maps and/or comprehensive land-use plans and without consideration of projected future construction of flood detention structures or projected future hydraulic modifications within a stream or other waterway, such as bridge and culvert construction, fill, and excavation.

Growth Management Act. In 1990, the Washington State Legislature passed the State Growth Management Act (ESHB 2929). The Act calls for urban counties and cities in the state to develop comprehensive plans to guide growth management decisions for at least the next decade. An amendment to the Act in 1991 required that counties, working with cities within their boundaries, develop Countywide Planning Policies to provide a common vision of the future to serve as the framework for all comprehensive plans throughout the county.

Hazard. An event or physical condition that has the potential to cause fatalities, injuries, property damage, infrastructure damage, agricultural loss, damage to the environment, interruption of business, and other types of loss or harm.

Hazard Mitigation. Hazard mitigation refers to reduction or alleviation of the loss of life, personal injury, and property damage that could result from a disaster through long- and short-term strategies.

Hazard mitigation involves strategies such as planning, policy changes, programs, projects, and other activities that could mitigate the impacts of hazards.

Hydraulic. Hydraulic is the branch of science or engineering that addresses fluids (especially water) in motion in rivers or canals, works and machinery for conducting or raising water, the use of water as a prime mover, and other fluid-related areas.

Hydrology. Hydrology is the analysis of waters of the earth. For example, a flood discharge estimate is developed by conducting a hydrologic study.

Incorporated Areas. Incorporated areas are those areas that exist within a city or a city's jurisdiction. King County contains 39 whole incorporated cities and parts of two others.

Large Woody Debris. Large pieces of wood in or partially in stream channels, including logs, pieces of logs, rootwads of trees, and other large chunks of wood. LWD provides streambed and bank stability and habitat complexity. LWD is also referred to as coarse woody debris (CWD). Either term usually refers to pieces at least 20 inches (51 cm) in diameter.

Levee. A manmade structure, usually an earthen embankment, designed and constructed to contain, control, or divert the flow of water so as to provide protection from temporary flooding.

Levee, Training. A partial levee system that does not tie off to high ground at one or both ends and functions as a raised revetment to re-direct the main flow of the river. A training levee is designed to prevent bank erosion and channel migration or avulsion. A training levee does not contain the base flood, but may provide limited protection against low level flooding.

Maintenance. Maintenance is the usual acts to prevent a decline, lapse or cessation from a lawfully established condition without any expansion of or significant change from that originally established condition. Activities within landscaped areas within areas subject to native vegetation retention requirements may be considered "maintenance" only if they maintain or enhance the canopy and understory cover. "Maintenance" includes repair work but does not include replacement work. When maintenance is conducted specifically in accordance with the Regional Road Maintenance Guidelines, the definition of "maintenance" in the glossary of those guidelines supersedes the definition of "maintenance" in this section.

May. See definition for "Shall."

National Flood Insurance Program. The Federal Program under which flood-prone areas are identified and flood insurance is made available to the owners of the property in participating communities.

Native Vegetation. Native vegetation is plant species indigenous to the Puget Sound region that reasonably could be expected to naturally occur on the site.

Natural Resource Lands. The Growth Management Act requires cities and counties to designate natural resource lands which include the following: 1) agricultural land that have long-term significance for the commercial production of food or other agricultural products; 2) forest lands that have long-term significance for the commercial production of timber; and 3) mineral resource lands that have long-term significance for the extraction of minerals. The comprehensive Plan designates Agricultural Production Districts, Forest Production Districts, and Mineral Resource Sites.

No Adverse Impact Floodplain Management. No Adverse Impact Floodplain Management is where the action of one property owner does not adversely impact the rights of other property owners, as measured by increased flood peaks, flood stage, flood velocity, and erosion and sedimentation.

Non-Structural Solutions. Non-structural solutions are methods of reducing flood risks through regulations of development in the floodplain, rather than structurally altering the river or stream itself.

Open Space. Open space is areas left predominately in a natural state to create urban separators and greenbelts, sustain native ecosystems, connect and increase protective buffers for environmentally sensitive areas, provide a visual contrast to continuous development, reinforce community identity and aesthetics, or provide links between important environmental or recreational resources.

Passive Recreation. Passive recreation requires a lower level of development and provides areas for informal, self-directed activities for individuals and groups.

Public Agency. Public agency means any agency, political subdivision or unit of local government of this state including, but not limited to, municipal corporations, special purpose districts and local service districts, any agency of the State of Washington, the United States or any state thereof or any Indian tribe recognized as such by the federal government.

Redds. Redds are nests made in gravel (particularly by salmonids); consisting of a depression that is created and then covered.

Regulatory Floodplain. This term refers to an area regulated by King County as floodplain through its land-use regulations. It includes, but is not limited to, areas identified by FEMA and published on FIRMs and additional areas identified by King County as being susceptible to flooding using best available flood information.

Repair. Repair means to fix or restore to sound condition after damage. "Repair" does not include replacement of structures or systems.

Repetitive Loss Property. A repetitive loss property is any NFIP-insured property that, since 1978 and regardless of any change(s) of ownership during that period, has experienced any of the following:

- Four or more paid flood losses exceeding \$1,000 each
- Two paid flood losses exceeding \$1,000 each within any 10-year period since 1978
- Three or more paid losses that equal or exceed the current value of the insured property

Repetitive Loss Area. A defined area that includes identified repetitive loss properties and other properties not listed as repetitive loss that are subject to the same flooding conditions.

Revetment. A facing of stone, broken rock, or other material placed on a streambank or slope to minimize erosion by moving water.

Riparian Area. The area adjacent to flowing water, for example rivers, perennial or intermittent streams, seeps or springs, that contains elements of both aquatic and terrestrial ecosystems, which mutually influence each other.

Risk. Risk is the estimated impact that a hazard would have on people, services, facilities, and structures in a community. Risk measures the likelihood of a hazard occurring and resulting in an adverse condition that causes injury or damage. Risk is often expressed in relative terms such as a high, moderate, or low likelihood of sustaining damage above a particular threshold due to occurrence of a specific type of hazard. Risk also can be expressed in terms of potential monetary losses associated with the intensity of the hazard.

Risk Assessment. Risk assessment is the process of measuring potential loss of life, personal injury, economic injury, and property damage resulting from hazards. This process assesses the vulnerability of people, buildings, and infrastructure to hazards and focuses on (1) hazard identification; (2) impacts of hazards on physical, social, and economic assets; (3) vulnerability identification; and (4) estimates of the cost of damage or costs that could be avoided through mitigation.

River Improvement Fund. The River Improvement Fund is a county-wide property tax levy authorized under 86.12 Revised Code of Washington, for the purpose of funding the construction and repair of flood control facilities on major rivers throughout King County.

Riverine. Of or produced by a river. Riverine floodplains have readily identifiable channels.

River and Floodplain Management Program. The River and Floodplain Management Program is the program administered by the Regional Services Section of the Water and Land Resources Division, Department of Natural Resources and Parks, and funded by the River Improvement Fund, Green River Flood Control Zone District and Inter-County River Improvement Fund, to conduct the following activities:

- A. Structural Capital Improvement Projects;
- B. Relocation and Elevation Projects;
- C. Maintenance and Monitoring;
- D. River Planning;
- E. Flood Hazard Education;
- F. Flood Warning and Emergency Response;
- G. Complaint Response and Enforcement; and
- H. Interlocal Coordination.

Salmonid. Salmonid are a member of the fish family Salmonidae, including, but not limited to:

- A. Chinook, coho, chum, sockeye and pink salmon;
- B. Rainbow, steelhead and cutthroat salmon, which are also known as trout;
- C. Brown trout;
- D. Brook, bull trout, which is also known as char, and Dolly Varden char;
- E. Kokanee; and
- F. Pygmy whitefish.

Shall. To guide King County, the use of the terms “shall,” “will,” “should,” and “may” in policies determine the level of discretion the County can exercise in making future and specific land use, budget, development regulation and other decisions. “Shall” and “will” in a policy mean that it is mandatory for the County to carry out the policy, even if a timeframe is not included. “Shall” and “will” are imperative and nondiscretionary – the County must make decisions based on what the policy says to do. “Should” in a policy provides noncompulsory guidance, and establishes that the County has some discretion in making decisions. “May” in a policy means that it is in the County’s interest to carry out the policy, but the County has total discretion in making decisions.

Should. See definition for “Shall.”

Stakeholder. Stakeholders are individuals or groups that could be affected in any way by an action or policy and include business leaders, civic groups, academia, non-profit organizations, major employers, managers of critical facilities, farmers, developers, special purpose districts, and others.

Structural Solution. Reducing flood hazard through physical means, such as dams, levees, revetments, or channelization of rivers and streams.

Structure. A structure is anything permanently constructed in or on the ground, or over the water; excluding fences six feet or less in height, decks less than 18 inches above grade, paved areas, and structural or non-structural fill.

Vulnerability. Vulnerability describes how exposed or susceptible an asset is to damage. Vulnerability depends on an asset's construction, contents, and the economic value of its functions. Like indirect damages, the vulnerability of one element of the community is often related to the vulnerability of another. For example, many businesses depend on uninterrupted electrical power. Flooding of an electric substation would affect not only the substation itself but businesses as well. Often, indirect effects can be much more widespread and damaging than direct effects.

Water Resource Inventory Area (WRIA). WRIs were formalized under WAC 173-500-040 and authorized under the Water Resources Act of 1971, RCW 90.54. Ecology was given the responsibility for the development and management of these administrative and planning boundaries. These boundaries represent the administrative underpinning of this agency's business activities. The original WRIA boundary agreements and judgments were reached jointly by Washington's natural resource agencies (Ecology, Natural Resources, Fish and Wildlife) in 1970.

Watershed. An area of land that drains into a single outlet and is separated from other drainage basins by a divide.

Wild and Scenic River. A federal designation that is intended to protect the natural character of rivers and their habitat without adversely affecting surrounding property.

Will. See definition for "Shall."